

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1 – 4. (canceled)

5. (currently amended) A receiver unit ~~[[in]]~~ for a wireless communication system, the receiver unit comprising:

a channel estimator ~~operative~~ configured to derive estimates of one or more characteristics of a communication channel used for a data transmission;

a rate selector ~~operative~~ configured to receive channel estimates from the channel estimator and a set of parameters indicative of a particular rate for the data transmission, derive a metric for an equivalent channel, determine a threshold signal quality required for the equivalent channel to support the particular rate, and indicate whether or not the particular rate is supported by the communication channel based on the metric and the threshold signal quality; and

a metric adjuster ~~operative~~ configured to adjust the metric for the equivalent channel using a predetermined back-off factor.

6. (currently amended) The receiver unit of claim 5, further comprising:

a decoder ~~operative~~ configured to provide a status of each received transmission for a particular packet of data; and

a controller ~~operative~~ configured to provide feedback information comprised of the particular rate and an indication of the packet status.

7. canceled

8. (currently amended) An apparatus for a wireless communication system, the apparatus comprising:

means for identifying a set of parameters for the data transmission;
means for estimating one or more characteristics of the communication channel;
means for deriving a metric for an equivalent channel based on the set of parameters and the one or more estimated channel characteristics;

means for adjusting the metric to form an adjusted metric, wherein adjusting is done according to a back-off factor, the back-off factor designed to minimize Packet Error Rate (PER);

means for determining a threshold signal quality required for the equivalent channel to support a particular data rate;

means for comparing the adjusted metric to the threshold signal quality;

means for adjusting the threshold signal quality;

means for selecting a data rate in response;

means for indicating whether or not the particular data rate is supported by the communication channel based on the metric and the threshold signal quality; ~~The apparatus of claim 7, further comprising:~~

means for determining an equivalent data rate for the equivalent channel based on a first function, the set of parameters, and the channel estimates, and

wherein the metric is derived based on a second function, the equivalent data rate, and a particular modulation scheme associated with the particular rate.

9. (original) The apparatus of claim 8, further comprising:

means for storing one or more tables for the first function.

10. (currently amended) A method for determining a data rate for a data transmission over a communication channel in a wireless communication system, comprising:

- estimating one or more characteristics of the communication channel;
- deriving a metric for an equivalent channel based on ~~[[the]]~~ a set of parameters and the one or more estimated channel characteristics;
- adjusting the metric for the equivalent channel to form an adjusted metric, wherein adjusting is done according to a back-off factor, ~~the back-off factor designed to minimize Packet Error Rate (PER);~~
- determining a threshold signal quality required for the equivalent channel to support a particular data rate;
- comparing the adjusted metric to the threshold signal quality; and
- selecting a data rate in response to a result of comparing the adjusted metric to the threshold signal quality.

11. (original) The method as in claim 10, wherein the metric is Signal-to-Noise Ratio.

12. canceled

13. (currently amended) An apparatus for determining a data rate for a data transmission over a communication channel in a wireless communication system, the apparatus comprising:

- means for estimating one or more characteristics of the communication channel;
- means for deriving a metric for an equivalent channel based on ~~the~~ a set of parameters and the one or more estimated channel characteristics;
- means for adjusting the metric for the equivalent channel to form an adjusted metric, wherein adjusting is done according to a back-off factor, ~~the back-off factor designed to minimize Packet Error Rate (PER);~~
- means for determining a threshold signal quality required for the equivalent channel to support a particular data rate;
- means for comparing the adjusted metric to the threshold signal quality; and

means for selecting a data rate in response to a result of comparing the adjusted metric to the threshold signal quality.

14. (currently amended) A computer readable media embodying a computer program for determining a data rate for a data transmission over a communication channel in a wireless communication system, the computer program comprising:

a first set of instructions for estimating one or more characteristics of the communication channel;

a second set of instructions for deriving a metric for an equivalent channel based on ~~[[the]]~~ a set of parameters and the one or more estimated channel characteristics;

a third set of instructions for adjusting the metric for the equivalent channel to form an adjusted metric, wherein adjusting is done according to a back-off factor, ~~the back-off factor designed to minimize Packet Error Rate (PER);~~

a fourth set of instructions for determining a threshold signal quality required for the equivalent channel to support a particular data rate;

a fifth set of instructions for comparing the adjusted metric to the threshold signal quality; and

a sixth set of instructions for selecting a data rate in response to a result of comparing the adjusted metric to the threshold signal quality.